

09/802376

FILE 'REGISTRY' ENTERED AT 11:56:14 ON 01 NOV 2004
L1 102 S TGA CTGTGAACGTTTCGAGATGA/SQSN

FILE 'CAPLUS' ENTERED AT 11:57:03 ON 01 NOV 2004
L2 76 S L1
L3 36 S L2 AND (IMMUNOMODULAT? OR IMMUN?(3A)MODULAT?)

L3 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 15 Jul 2004
ACCESSION NUMBER: 2004:566552 CAPLUS
DOCUMENT NUMBER: 141:99693
TITLE: Immunostimulatory oligonucleotides, sequences, and
methods of using the same
INVENTOR(S): Dina, Dino; Fearon, Karen L.; Marshall, Jason
PATENT ASSIGNEE(S): Dynavax Technologies, USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2004058179 | A2 | 20040715 | WO 2003-US41001 | 20031218 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | US 2002-436122P | P 20021223 |
| | | | US 2003-447885P | P 20030213 |
| | | | US 2003-467546P | P 20030501 |

AB The invention provides **immunomodulatory** polynucleotides (IMPs) and methods for **immunomodulation** of individuals using the **immunomodulatory** polynucleotides. In accordance with the present invention, the IMP contains at least one palindromic sequence of at least 8 bases in length containing at least one CG dinucleotide. The IMP also contains at least one TCG trinucleotide sequence at or near the 5'-end of the polynucleotide. In some instances, the palindromic sequence and the 5'-TCG are separated by 0, 1, 2, 3, 4 or 5 bases in the IMP. In some instances the palindromic sequence includes all or part of the 5'-TCG. Claimed is an **immunomodulatory** polynucleotide, comprising: (a) 5'-Nx(TCG(Nq))yNw(X1X2CGX2'X1'(CG)p)z (SEQ ID NO: 156) wherein N are nucleosides, x = 0-3, yr = 1-4, w = -2, -1, 0, 1 or 2, p = 0 or 1, q = 0, 1 or 2, and z = 1-20, X1 and X1', X2 and X2' are self-complimentary nucleosides, and wherein the 5' T of the (TCG(Nq))y sequence is 0-3 bases from the 5' end of the polynucleotide; and (b) a palindromic sequence at least 8 bases in length wherein the palindromic sequence comprises the first (X1X2CGX2'X,') of the (X1X2CGX2'X1'(CG)p)z sequences.

IT 721175-12-8

RL: PRP (Properties)

(unclaimed nucleotide sequence; immunostimulatory oligonucleotides, sequences, and methods of using the same)

L3 ANSWER 2 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 09 Jul 2004

ACCESSION NUMBER: 2004:550731 CAPLUS

DOCUMENT NUMBER: 141:99687

TITLE: Chimeric **immunomodulatory** compounds and methods of using the same

INVENTOR(S): Fearon, Karen L.; Dina, Dino; Tuck, Stephen F.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 132 pp., Cont.-in-part of U.S. Pat. Appl. 2003 225,016.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 2004132677 | A1 | 20040708 | US 2003-623371 | 20030718 |
| US 2003175731 | A1 | 20030918 | US 2002-176883 | 20020621 |
| US 2003199466 | A1 | 20031023 | US 2002-177826 | 20020621 |
| US 2003225016 | A1 | 20031204 | US 2002-328578 | 20021223 |
| PRIORITY APPLN. INFO.: | | | US 2001-299883P | P 20010621 |
| | | | US 2002-375253P | P 20020423 |
| | | | US 2002-176883 | A2 20020621 |
| | | | US 2002-177826 | A2 20020621 |
| | | | US 2002-328578 | A2 20021223 |

AB The invention provides chimeric **immunomodulatory** compds. (CICs) and methods for **immunomodulation** of individuals using the **immunomodulatory** compds. **Immunomodulation** is accomplished by administration of **immunomodulatory** polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may be covalently or non-covalently bound, and feature a polynucleotide comprising at least one immunostimulatory sequence bound to a nonbiodegradable microcarrier or nanocarrier. Claimed is a CIC that stimulates production of IFN- α from human peripheral blood mononuclear cells, and comprises at least three nucleic acid moieties, at least one of which comprises a sequence 5'-TCGY, where Y is selected from the group consisting of XCGX, XTCG, XXCG, and CGXX, where X is any nucleotide, and at least one nonnucleic acid spacer moiety.

IT 503638-07-1

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chimeric **immunomodulatory** compds. (CICs) and methods of using same)

IT 718384-16-8 718384-37-3

RL: PRP (Properties)

(unclaimed nucleotide sequence; chimeric **immunomodulatory** compds. and methods of using the same)

L3 ANSWER 3 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

09/802376

ED Entered STN: 25 Jun 2004
ACCESSION NUMBER: 2004:513488 CAPLUS
DOCUMENT NUMBER: 141:70229
TITLE: Compositions comprising truncated flavivirus envelope glycoproteins and adjuvant for use as recombinant vaccine against flavivirus infection
INVENTOR(S): Lieberman, Michael
PATENT ASSIGNEE(S): Hawaii Biotech, Inc., USA
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2004052293 | A2 | 20040624 | WO 2003-US38914 | 20031208 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2004213808 | A1 | 20041028 | US 2003-730776 | 20031208 |
| PRIORITY APPLN. INFO.: | | | US 2002-432865P | P 20021211 |
| | | | US 2003-493312P | P 20030806 |

AB An immunogenic composition is described which preferably contains recombinantly produced forms of truncated flavivirus envelope glycoproteins and an adjuvant. The disclosed immunogenic compns. can further comprise a recombinantly produced non-structural (non-envelope) flavivirus protein. The adjuvant typically comprises a saponin preferably derived from the Quillaja saponaria tree or a derivative thereof. The adjuvant can also comprise an oligodeoxyribonucleotide preferably containing specific sequences of nucleotides described herein. A pharmaceutically acceptable vehicle may also be included in the immunogenic composition

IT 711385-52-3

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. comprising truncated flavivirus envelope glycoproteins and adjuvant for use as recombinant vaccine against flavivirus infection)

L3 ANSWER 4 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 22 Feb 2004
ACCESSION NUMBER: 2004:142919 CAPLUS
DOCUMENT NUMBER: 140:198064
TITLE: Particulate immunostimulant
INVENTOR(S): Van Nest, Gary; Tuck, Stephen
PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

Searcher : Shears 571-272-2528

09/802376

SOURCE: PCT Int. Appl., 90 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2004014322 | A2 | 20040219 | WO 2003-US25415 | 20030812 |
| WO 2004014322 | A3 | 20040708 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

PRIORITY APPLN. INFO.: US 2002-402968P P 20020812

AB The authors disclose **immunomodulatory** compns. which comprise a cationic condensing agent, an **immunomodulatory** compound, and a stabilizing agent. The compns. of the invention typically form particles which have increased **immunomodulatory** activity as compared to **immunomodulatory** compds. not formulated in the compns. of the invention. Also provided are methods of making the compns. and methods for therapeutic use of the compns. In one example, interferon- γ release by human mononuclear cells was shown to be enhanced by the combination of CpG oligonucleotide, polymyxin B, and Tween-80.

IT **661771-84-2**

RL: PRP (Properties)
 (unclaimed sequence; particulate immunostimulant)

L3 ANSWER 5 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 26 Jan 2004

ACCESSION NUMBER: 2004:60254 CAPLUS

DOCUMENT NUMBER: 140:139452

TITLE: Combination therapies with FTC and an **immunomodulator** for the treatment of hepatitis B virus infection

INVENTOR(S): Furman, Philip A.

PATENT ASSIGNEE(S): Triangle Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2004006848 | A2 | 20040122 | WO 2003-US21929 | 20030715 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, | | | | |

Searcher : Shears 571-272-2528

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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-396117P P 20020715

AB A method, use and composition for the treatment of a host infected with hepatitis B is provided that includes administering β -L-FTC or its pharmaceutically acceptable salt or prodrug in combination or alternation with an **immunomodulator**, or in particular, an immunostimulating agent to achieve minimal or no detectable viral load in the host, which may be a human.

IT 647920-72-7

RL: PRP (Properties)

(unclaimed sequence; combination therapies with FTC and an **immunomodulator** for the treatment of hepatitis B virus infection)

L3 ANSWER 6 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 18 Jan 2004

ACCESSION NUMBER: 2004:41111 CAPLUS

DOCUMENT NUMBER: 140:105233

TITLE: Methods of preventing and treating respiratory viral infection using **immunomodulatory** polynucleotide sequences

INVENTOR(S): Van Nest, Gary

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. Pat. Appl. 2001 46,967.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 2004009942 | A1 | 20040115 | US 2003-426237 | 20030429 |
| US 2001046967 | A1 | 20011129 | US 2001-802686 | 20010309 |
| PRIORITY APPLN. INFO.: | | | US 2000-188583P | P 20000310 |
| | | | US 2001-802686 | A2 20010309 |

AB The invention provides methods of preventing and/or treating infection by a respiratory virus such as respiratory syncytial virus (RSV) and SARS-associated coronavirus, particularly reducing infection and/or one or more symptoms of respiratory virus infection. A polynucleotide comprising an immunostimulatory sequence (an "ISS") is administered to an individual which is at risk of being exposed to a respiratory virus, has been exposed to a respiratory virus or is infected with a respiratory virus. The ISS is administered without any antigens of the respiratory virus. Administration of the ISS results in reduced incidence and/or severity of one or more symptoms of respiratory virus infection. Nasal administration

Searcher : Shears 571-272-2528

of ISS (5'-TGACTGTGAACGTTTCGAGATGA-3') reduced RSV viral titer in infected tissue compared to PBS or non-ISS administration. A first administration of ISS on the day of infection was not effective, while administration before infection (in this experiment, 3 days) was effective at reducing viral titers.

IT 645428-19-9 646074-82-0

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunomodulatory polynucleotide sequences for preventing and treating respiratory viral infection)

L3 ANSWER 7 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 05 Dec 2003

ACCESSION NUMBER: 2003:950038 CAPLUS

DOCUMENT NUMBER: 140:26897

TITLE: Chimeric immunomodulatory compounds comprising two or more nucleic acid moieties and non-nucleic acid spacer

INVENTOR(S): Fearon, Karen L.; Dina, Dino; Tuck, Stephen F.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 96 pp., Cont.-in-part of U.S. Ser. No. 176,883.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 2003225016 | A1 | 20031204 | US 2002-328578 | 20021223 |
| US 2003175731 | A1 | 20030918 | US 2002-176883 | 20020621 |
| US 2003199466 | A1 | 20031023 | US 2002-177826 | 20020621 |
| US 2004132677 | A1 | 20040708 | US 2003-623371 | 20030718 |
| PRIORITY APPLN. INFO.: | | | US 2001-299883P | P 20010621 |
| | | | US 2002-375253P | P 20020423 |
| | | | US 2002-176883 | A2 20020621 |
| | | | US 2002-177826 | A2 20020621 |
| | | | US 2002-328578 | A2 20021223 |

AB The invention provides immunomodulatory compds. and methods for immunomodulation of individuals using the immunomodulatory compds. The immunomodulatory compds. comprise two or more nucleic acid moieties and a non-nucleic acid spacer moiety. The nucleic acid contains e.g. 5'-CG-3', 5'-TCG-3', 5'-TCGA-3', 5'-TCGACGT-3', or 5'-TCGACGA-3'; and the non-nucleic acid is an oligoethylene glycol such as hexaethylene glycol. The chimeric compds. are incorporated into endotoxin-free compns. comprising antigen, pharmaceutically acceptable excipient, and optionally a cationic microsphere for modulating immune response.

IT 628357-70-0P 631925-82-1P 631926-19-7P
632370-48-0P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(chimeric immunomodulatory compds. comprising two or more

nucleic acid moieties and non-nucleic acid spacer)
 IT **630432-24-5**
 RL: PRP (Properties)
 (unclaimed sequence; chimeric **immunomodulatory** compds.
 comprising two or more nucleic acid moieties and non-nucleic acid
 spacer)

L3 ANSWER 8 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 11 Jul 2003

ACCESSION NUMBER: 2003:532336 CAPLUS

DOCUMENT NUMBER: 139:79154

TITLE: Use of **immunomodulatory** CpG
 oligodeoxynucleotides for treatment of inflammatory
 bowel disease and other gastrointestinal inflammation

INVENTOR(S): Raz, Eyal; Rachmilewitz, Daniel

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S.
 Ser. No. 791,500.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 2003130217 | A1 | 20030710 | US 2002-219143 | 20020813 |
| US 2002042387 | A1 | 20020411 | US 2001-791500 | 20010222 |
| US 6613751 | B2 | 20030902 | | |
| US 2003176389 | A1 | 20030918 | US 2003-412151 | 20030411 |
| PRIORITY APPLN. INFO.: | | | US 2000-184256P | P 20000223 |
| | | | US 2001-791500 | A2 20010222 |

AB The invention provides a method for ameliorating gastrointestinal
 inflammation, particularly chronic gastrointestinal inflammation such as
 inflammatory bowel disease (IBD), in a subject. In one embodiment, the
 method comprises administering an **immunomodulatory** nucleic acid
 to a subject suffering from or susceptible to gastrointestinal
 inflammation.

IT **556163-51-0**

RL: PRP (Properties)

(unclaimed nucleotide sequence; use of **immunomodulatory** CpG
 oligodeoxynucleotides for treatment of inflammatory bowel disease and
 other gastrointestinal inflammation)

L3 ANSWER 9 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 09 Jul 2003

ACCESSION NUMBER: 2003:524031 CAPLUS

DOCUMENT NUMBER: 139:83965

TITLE: Immunostimulatory oligonucleotides and antigens for
 screening immunostimulants and for treating cancer,
 allergy and infections

INVENTOR(S): Raz, Eyal; Roman, Mark; Dina, Dino

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: U.S., 44 pp., Cont.-in-part of U.S. Ser. No. 92,329,
 abandoned.

CODEN: USXXAM

09/802376

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| US 6589940 | B1 | 20030708 | US 1999-296477 | 19990422 |
| EP 1374894 | A2 | 20040102 | EP 2003-20257 | 19980605 |
| EP 1374894 | A3 | 20040922 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY | | | | |
| US 2002086839 | A1 | 20020704 | US 2001-770943 | 20010125 |
| US 2004006034 | A1 | 20040108 | US 2003-413504 | 20030411 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1997-48793P | P 19970606 |
| | | | US 1998-92329 | B2 19980605 |
| | | | EP 1998-926311 | A3 19980605 |
| | | | US 1998-92314 | A1 19980605 |
| | | | US 1999-296477 | A1 19990422 |

AB The invention relates to immunostimulatory oligonucleotide compns. These oligonucleotides comprise an immunostimulatory octanucleotide sequence. These oligonucleotides can be administered in conjunction with an immunostimulatory peptide or antigen. Methods for **modulating** an **immune** response upon administration of the oligonucleotide are also disclosed. In addition, an in vitro screening method to identify oligonucleotides with immunostimulatory activity is provided.

IT 552901-87-8D, phosphorothioate or phosphate derivs.
 552901-88-9D, phosphorothioate or phosphate derivs.
 554461-70-0D, phosphorothioate or phosphate derivs.

RL: ARG (Analytical reagent use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (immunostimulatory oligonucleotides and antigens for screening immunostimulants and for treating cancer, allergy and infections)

REFERENCE COUNT: 240 THERE ARE 240 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
 ED Entered STN: 25 Apr 2003

ACCESSION NUMBER: 2003:319450 CAPLUS

DOCUMENT NUMBER: 138:331689

TITLE: Polarization of the helper T-cell response with immunostimulatory nucleic acid

INVENTOR(S): Raz, Eyal; Broide, David

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 56 pp., Cont.-in-part of U.S. Ser. No. 235,742.
 CODEN: USXXCO

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 12
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2003078223 | A1 | 20030424 | US 2002-99512 | 20020315 |

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US 6498148 B1 20021224 US 1999-235742 19990121
AU 759590 B2 20030417 AU 2001-23162 20010221
US 2003203861 A1 20031030 US 2001-947209 20010904
US 2003109469 A1 20030612 US 2002-99379 20020614
US 2003092663 A1 20030515 US 2002-229208 20020826
PRIORITY APPLN. INFO.: US 1996-593554 B1 19960130
US 1997-927120 B2 19970905
US 1999-235742 A2 19990121
US 1999-265191 A2 19990310
US 2001-276865P P 20010316
US 1993-112440 B2 19930826
US 1995-446691 B2 19950607
AU 1997-18418 A3 19970128

AB The authors disclose methods of maintaining suppression of a Th2 immune response and increasing a Th1 immune response in an individual. The methods generally involve administering to an individual an effective amount of an immunostimulatory nucleic acid. In one example, administration of an immunostimulatory oligonucleotide suppresses pulmonary eosinophil accumulation in a Th2-driven model of asthma. Amelioration of the immunol. markers associated with asthma pathol. was shown to coincide with polarization to a type 1 helper T-cell response.

IT 515181-95-0

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunomodulatory and therapeutic application of CpG-containing oligonucleotides)

L3 ANSWER 11 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 28 Mar 2003

ACCESSION NUMBER: 2003:241873 CAPLUS

DOCUMENT NUMBER: 138:292710

TITLE: Immunomodulatory formulations and methods for use thereof

INVENTOR(S): Van Nest, Gary; Tuck, Stephen; Fearon, Karen L.; Dina, Dino

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Ser. No. 802,376.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 2003059773 | A1 | 20030327 | US 2001-927884 | 20010810 |
| US 2002055477 | A1 | 20020509 | US 2001-802376 | 20010309 |
| WO 2003015816 | A1 | 20030227 | WO 2001-US25364 | 20010813 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

Searcher : Shears 571-272-2528

09/802376

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
EP 1414490 A1 20040506 EP 2001-959743 20010813
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.: US 2000-188557P P 20000310
US 2001-802376 A2 20010309
US 2001-927422 A2 20010810
US 2001-927884 A2 20010810
WO 2001-US25364 W 20010813

OTHER SOURCE(S): MARPAT 138:292710

AB The invention provides new compns. and methods for
immunomodulation of individuals. **Immunomodulation** is
accomplished by administration of **immunomodulatory**
polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may
be covalently or non-covalently bound, and feature a polynucleotide
comprising at least one immunostimulatory sequence bound to a
nonbiodegradable microcarrier or nanocarrier.

IT 503638-07-1

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical
process); PRP (Properties); PYP (Physical process); THU (Therapeutic use);
BIOL (Biological study); PROC (Process); USES (Uses)
(**immunomodulatory** polynucleotide/microcarrier complex
formulations and methods for use thereof)

L3 ANSWER 12 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 21 Feb 2003

ACCESSION NUMBER: 2003:133429 CAPLUS

DOCUMENT NUMBER: 138:210275

TITLE: **Immunomodulatory** compositions, formulations,
and methods for use thereof

INVENTOR(S): Fearon, Karen L.; Dina, Dino

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: PCT Int. Appl., 79 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2003014316 | A2 | 20030220 | WO 2002-US25123 | 20020807 |
| WO 2003014316 | A3 | 20040311 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

Searcher : Shears 571-272-2528

09/802376

US 2003133988 A1 20030717 US 2002-214799 20020807
EP 1420829 A2 20040526 EP 2002-761284 20020807
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
PRIORITY APPLN. INFO.: US 2001-310743P P 20010807
US 2001-335263P P 20011025
WO 2002-US25123 W 20020807

OTHER SOURCE(S): MARPAT 138:210275

AB The invention provides new compns. and methods for
immunomodulation of individuals. **Immunomodulation** is
accomplished by administration of **immunomodulatory**
polynucleotide/microcarrier (IMO/MC) complexes comprising 3-6mer
immunomodulatory oligonucleotides. The IMO/MC complexes may be
covalently or non-covalently bound. Also provided are
immunomodulatory compns. comprising a 3-6mer IMO encapsulated in
an MC.

IT 499810-15-0

RL: PRP (Properties)

(unclaimed sequence; **immunomodulatory** compns., formulations,
and methods for use thereof)

L3 ANSWER 13 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 31 Jan 2003

ACCESSION NUMBER: 2003:77543 CAPLUS

DOCUMENT NUMBER: 138:142468

TITLE: Biodegradable **immunomodulatory** formulations
containing polynucleotides

INVENTOR(S): Van Nest, Gary; Tuck, Stephen; Fearon, Karen L.; Dina,
Dino

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 35 pp., Cont.-in-part of U.S.
Ser. No. 802,359.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| US 2003022852 | A1 | 20030130 | US 2001-927422 | 20010810 |
| US 2003129251 | A1 | 20030710 | US 2001-802359 | 20010309 |
| WO 2003015816 | A1 | 20030227 | WO 2001-US25364 | 20010813 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1414490 | A1 | 20040506 | EP 2001-959743 | 20010813 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| PRIORITY APPLN. INFO.: | | | US 2000-188303P | P 20000310 |

Searcher : Shears 571-272-2528

09/802376

US 2001-802359 A2 20010309
US 2001-927422 A2 20010810
US 2001-927884 A2 20010810
WO 2001-US25364 W 20010813

AB The invention provides new compns. and methods for **immunomodulation** of individuals. **Immunomodulation** is accomplished by administration of **immunomodulatory** polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may be covalently or non-covalently bound, and feature a polynucleotide comprising at least one immunostimulatory sequence bound to a biodegradable microcarrier or noncarrier.

IT **491894-86-1 492479-51-3**

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(biodegradable **immunomodulatory** formulations containing polynucleotide/microcarrier and optionally allergen)

L3 ANSWER 14 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 05 Jan 2003

ACCESSION NUMBER: 2003:6160 CAPLUS

DOCUMENT NUMBER: 138:88635

TITLE: Chimeric **immunomodulatory** compounds comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer

INVENTOR(S): Fearon, Karen L.; Dina, Dino; Tuck, Stephen F.

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: PCT Int. Appl., 224 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2003000922 | A2 | 20030103 | WO 2002-US20025 | 20020621 |
| WO 2003000922 | A3 | 20031023 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1404873 | A2 | 20040407 | EP 2002-744589 | 20020621 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |

PRIORITY APPLN. INFO.: US 2001-299883P P 20010621
US 2002-375253P P 20020423
WO 2002-US20025 W 20020621

AB The invention provides **immunomodulatory** compds. (CIC) and methods for **immunomodulation** of individuals using the

Searcher : Shears 571-272-2528

immunomodulatory compds. The CIC comprises one or more nucleic acid moieties and one or more non-nucleic acid moieties such as dendrimer, polysaccharide, and crosslinked polysaccharide through phosphodiester, phosphorothioate ester, phosphorodithioate ester, and other linkages. The CIC is capable of stimulating production of interferon γ and α by human peripheral blood mononuclear cells, as well as human B cell proliferation. Endotoxin-free compns. comprising the CIC covalently or non-covalently conjugated with antigen and cationic microsphere are useful for treating disorders associated with IgE or Th2-type immune response such as allergy, asthma, infection, viral infection, idiopathic pulmonary fibrosis, and cancer.

IT 482661-42-7P 482663-60-5P 483382-52-1P
483382-54-3P

RL: PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chimeric **immunomodulatory** compds. comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer)

IT 479469-88-0P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(chimeric **immunomodulatory** compds. comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer)

IT 482386-35-6 482387-18-8

RL: PRP (Properties)
(unclaimed nucleotide sequence; chimeric **immunomodulatory** compds. comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer)

L3 ANSWER 15 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 27 Sep 2002

ACCESSION NUMBER: 2002:736377 CAPLUS

DOCUMENT NUMBER: 137:273193

TITLE: Nucleic acid compositions and methods for **modulating an immune response**

INVENTOR(S): Broide, David H.; Raz, Eyal

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| WO 2002074922 | A2 | 20020926 | WO 2002-US8207 | 20020315 |
| WO 2002074922 | A3 | 20030220 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, | | | |

09/802376

UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 759590 B2 20030417 AU 2001-23162 20010221
PRIORITY APPLN. INFO.: US 2001-276865P P 20010316
AU 1997-18418 A3 19970128
AB The invention provides methods of maintaining suppression of a Th2 immune
response, and methods of maintaining an increase in a Th1 immune response
in an individual. The methods generally involve administering to an
individual an effective amount of a first dose of a composition comprising
an **immunomodulatory** nucleic acid, and, after a suitable time,
administering at least a second dose of a composition comprising an
immunomodulatory nucleic acid.
IT **462164-09-6**
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic
use); BIOL (Biological study); USES (Uses)
(nucleic acid compns. and methods for **modulating**
immune response)
L3 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
ED Entered STN: 05 Jul 2002
ACCESSION NUMBER: 2002:504922 CAPLUS
DOCUMENT NUMBER: 137:73254
TITLE: **Immunomodulatory** oligonucleotides containing
immunostimulatory sequences for treatment of disorders
associated with a Th2-type immune response
INVENTOR(S): Fearon, Karen L.; Dina, Dino
PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2002052002 | A2 | 20020704 | WO 2001-US50821 | 20011227 |
| WO 2002052002 | A3 | 20030904 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2003049266 | A1 | 20030313 | US 2001-33243 | 20011227 |
| EP 1364010 | A2 | 20031126 | EP 2001-991610 | 20011227 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |

Searcher : Shears 571-272-2528

09/802376

JP 2004525616 T2 20040826 JP 2002-553483 20011227
PRIORITY APPLN. INFO.: US 2000-258675P P 20001227
WO 2001-US50821 W 20011227

OTHER SOURCE(S): MARPAT 137:73254

AB The invention provides **immunomodulatory** polynucleotides and methods for **immunomodulation** of individuals using the **immunomodulatory** polynucleotides. Each **immunomodulatory** polynucleotide comprises at least one immunostimulatory sequence (ISS). Thus, administration of 5'-tgactgtgaazggttgagatga-3' (where z = 5-bromocytosine) in conjunction with hepatitis B surface antigen (HBsAg) to baboons resulted in increased titers of anti-HBsAg antibodies as compared to administration of HBsAg alone or to administration of HBsAg with a non-ISS oligonucleotide. Complexation of **immunomodulatory** polynucleotides with cationic poly(lactic acid, glycolic acid) microspheres in a human PBMC assay showed significantly enhanced induction of interferon α and interferon γ in comparison to the polynucleotides alone.

IT 440004-73-9 440004-74-0 440004-81-9
440004-82-0

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**immunomodulatory** oligonucleotides containing immunostimulatory sequences for treatment of disorders associated with a Th2-type immune response)

IT 439896-90-9

RL: PRP (Properties)

(unclaimed sequence; **immunomodulatory** oligonucleotides containing immunostimulatory sequences for treatment of disorders associated with a Th2-type immune response)

L3 ANSWER 17 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 05 Apr 2002

ACCESSION NUMBER: 2002:256024 CAPLUS

DOCUMENT NUMBER: 136:293507

TITLE: Microparticles for delivery of the heterologous nucleic acids

INVENTOR(S): O'Hagan, Derek; Otten, Gillis; Donnelly, John James; Polo, John M.; Barnett, Susan; Singh, Manmohan; Ulmer, Jeffrey; Dubensky, Thomas W., Jr.

PATENT ASSIGNEE(S): Chiron Corporation, USA

SOURCE: PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002026209 | A2 | 20020404 | WO 2001-US30540 | 20010928 |
| WO 2002026209 | A3 | 20030103 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,

Searcher : Shears 571-272-2528

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2001094897 A5 20020408 AU 2001-94897 20010928
 BR 2001014305 A 20030701 BR 2001-14305 20010928
 EP 1322287 A2 20030702 EP 2001-975584 20010928
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2003138453 A1 20030724 US 2001-967464 20010928
 JP 2004518631 T2 20040624 JP 2002-530039 20010928
 PRIORITY APPLN. INFO.: US 2000-236105P P 20000928
 US 2001-315905P P 20010830
 WO 2001-US30540 W 20010928

AB Microparticles with adsorbent surfaces, methods of making such microparticles, and uses thereof, are disclosed. The microparticles comprise a polymer, such as a poly(α -hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone, a polyorthoester, a polyanhydride, and the like, and are formed using cationic, anionic, or nonionic detergents. Also provided are microparticles in the form of submicron emulsions of an oil droplet emulsion having a metabolizable oil and an emulsifying agent. The surface of the microparticles efficiently adsorb polypeptides, such as antigens, and nucleic acids, such as ELVIS vectors and other vector constructs, containing heterologous nucleotide sequences encoding biol.

active

macromols., such as polypeptides, antigens, and adjuvants. Methods of stimulating an immune response, methods of immunizing a host animal against a viral, bacterial, or parasitic infection, and uses of the microparticle comps. for vaccines are also provided.

IT 406856-76-6

RL: PRP (Properties)

(unclaimed nucleotide sequence; microparticles for delivery of the heterologous nucleic acids)

L3 ANSWER 18 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 16 Nov 2001

ACCESSION NUMBER: 2001:833485 CAPLUS

DOCUMENT NUMBER: 135:366775

TITLE: Agents that modulate DNA-PK activity and methods of use thereof

INVENTOR(S): Raz, Eyal; Lois, Augusto F.; Takabayashi, Kenji

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| WO 2001085910 | A2 | 20011115 | WO 2001-US14508 | 20010504 |
| WO 2001085910 | A3 | 20020404 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, | | | |

LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|------------------------|----|----------|-----------------|-------------|
| AU 2001074817 | A5 | 20011120 | AU 2001-74817 | 20010504 |
| US 2003176373 | A1 | 20030918 | US 2001-848986 | 20010504 |
| US 2003125284 | A1 | 20030703 | US 2002-233121 | 20020830 |
| PRIORITY APPLN. INFO.: | | | US 2000-202274P | P 20000505 |
| | | | US 2001-262321P | P 20010117 |
| | | | US 2001-848986 | A3 20010504 |
| | | | WO 2001-US14508 | W 20010504 |

AB The present invention provides methods for modulating cell death in a eukaryotic cell, and methods for reducing DNA damage in a eukaryotic cell. The methods generally comprise modulating a biol. activity of DNA-PK in a cell. The invention further provides method of treating a condition related to cell death in an individual. The invention further provides methods of identifying agents which modulate a biol. activity of DNA-PK, as well as agents identified by the methods. Methods of **modulating** an **immune** response using an identified agent are also provided.

IT **217447-24-0 220600-99-7**
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (agents that modulate DNA-PK activity and methods of use thereof)

L3 ANSWER 19 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
 ED Entered STN: 17 Oct 2001
 ACCESSION NUMBER: 2001:755469 CAPLUS
 DOCUMENT NUMBER: 136:288732
 TITLE: Immunostimulatory DNA inhibits IL-4-dependent IgE synthesis by human B cells
 AUTHOR(S): Homer, Anthony A.; Widhopf, George F.; Burger, Jan A.; Takabayashi, Kenji; Cinman, Nadya; Ronaghy, Arash; Spiegelberg, Hans L.; Raz, Eyal
 CORPORATE SOURCE: Departments of Medicine, University of California, San Diego, CA, 92093-0663, USA
 SOURCE: Journal of Allergy and Clinical Immunology (2001), 108(3), 417-423
 CODEN: JACIBY; ISSN: 0091-6749
 PUBLISHER: Mosby, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Immunostimulatory sequence oligodeoxynucleotide (ISS-ODN) is a potent antiallergic **immunomodulating** agent in mice. However, few studies have addressed its antiallergic potential in human subjects. The authors sought to determine whether a phosphorothioate ISS-ODN could inhibit IL-4-dependent IgE synthesis by human B cells. Initially, nonatopic- and atopic-donor PBMCs were incubated with ISS-ODN or mutated oligodeoxynucleotide, and cytokine production and B-cell expression of IFN- γ receptor and IL-4 receptor were measured by using ELISA and flow cytometry, resp. In subsequent studies atopic-donor PBMCs were incubated with IL-4 alone or with ISS-ODN or mutated oligodeoxynucleotide. After 14 days, IgE production and IgM, IgG, and IgA production were determined by using

ELISA. In select IgE studies cytokines were neutralized with mAbs. ISS-ODN induced IL-12, IFN- α , IFN- γ , IL-10, and IL-6 production from both nonatopic- and atopic-donor PBMCs. ISS-ODN also increased IFN- γ receptor and inhibited IL-4 receptor expression on B cells from both donor populations. Furthermore, ISS-ODN inhibited IL-4-dependent IgE production by atopic-donor PBMCs. Neutralization of IL-12, IFN- α , IFN- γ , and IL-10, but not IL-6, attenuated the inhibitory activity of ISS-ODN on IgE production. In contrast to its inhibition of IgE synthesis, ISS-ODN stimulated the production of IgM, IgG, and IgA. Thus, phosphorothioate ISS-ODN elicits an innate immune response by PBMCs, which inhibits IL-4-dependent IgE synthesis. These results provide further support for consideration of ISS-ODN therapy for the treatment of allergic disease in clin. practice.

IT 408555-79-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunostimulatory DNA inhibits interleukin-4-dependent IgE biosynthesis by human B cells)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 20 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 21 Sep 2001

ACCESSION NUMBER: 2001:693137 CAPLUS

DOCUMENT NUMBER: 135:271874

TITLE: Biodegradable immunomodulatory formulations and methods for use thereof

INVENTOR(S): Van Nest, Gary; Tuck, Stephen

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001068144 | A2 | 20010920 | WO 2001-US7848 | 20010312 |
| WO 2001068144 | A3 | 20020516 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2003129251 | A1 | 20030710 | US 2001-802359 | 20010309 |
| EP 1261378 | A2 | 20021204 | EP 2001-918571 | 20010312 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003526682 | T2 | 20030909 | JP 2001-566707 | 20010312 |
| PRIORITY APPLN. INFO.: | | | US 2000-188303P | P 20000310 |

09/802376

US 2001-802359

A2 20010309

WO 2001-US7848

W 20010312

AB The invention provides new compns. and methods for **immunomodulation** of individuals. **Immunomodulation** is accomplished by administration of **immunomodulatory** polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may be covalently or non-covalently bound, and feature a polynucleotide comprising at least one immunostimulatory sequence bound to a biodegradable microcarrier or nanocarrier.

IT 217447-24-0 217638-05-6 217638-06-7

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(formulations comprising immunostimulatory polynucleotide and biodegradable microcarrier or nanocarrier for)

L3 ANSWER 21 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 21 Sep 2001

ACCESSION NUMBER: 2001:693136 CAPLUS

DOCUMENT NUMBER: 135:262226

TITLE: **Immunomodulatory** formulations and methods for use thereof

INVENTOR(S): Van Nest, Gary; Tuck, Stephen

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|-------------|
| WO 2001068143 | A2 | 20010920 | WO 2001-US7843 | 20010312 |
| WO 2001068143 | A3 | 20020516 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2002055477 | A1 | 20020509 | US 2001-802376 | 20010309 |
| EP 1261377 | A2 | 20021204 | EP 2001-918568 | 20010312 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2004502645 | T2 | 20040129 | JP 2001-566706 | 20010312 |
| PRIORITY APPLN. INFO.: | | | US 2000-188557P | P 20000310 |
| | | | US 2001-802376 | A2 20010309 |
| | | | WO 2001-US7843 | W 20010312 |

AB The invention provides new compns. and methods for **immunomodulation** of individuals. **Immunomodulation** is accomplished by administration of **immunomodulatory** polynucleotide/microcarrier (IMP/MC) complexes. The IMP/MC complexes may be covalently or non-covalently bound, and feature a polynucleotide

Searcher : Shears 571-272-2528

comprising at least one immunostimulatory sequence bound to a nonbiodegradable microcarrier or nanocarrier.

IT **251974-00-2**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**immunomodulatory** oligonucleotide formulations and methods for use thereof)

L3 ANSWER 22 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 21 Sep 2001

ACCESSION NUMBER: 2001:693111 CAPLUS

DOCUMENT NUMBER: 135:267201

TITLE: Methods of reducing papillomavirus infection using **immunomodulatory** polynucleotide sequences

INVENTOR(S): Van Nest, Gary

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001068117 | A2 | 20010920 | WO 2001-US7842 | 20010312 |
| WO 2001068117 | A3 | 20020808 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2002107212 | A1 | 20020808 | US 2001-802445 | 20010309 |
| EP 1261353 | A2 | 20021204 | EP 2001-916582 | 20010312 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003526673 | T2 | 20030909 | JP 2001-566681 | 20010312 |
| PRIORITY APPLN. INFO.: | | | US 2000-188265P | P 20000310 |
| | | | US 2001-802445 | A 20010309 |
| | | | WO 2001-US7842 | W 20010312 |

AB The invention provides methods for the treatment of papillomavirus infections. A polynucleotide comprising an immunostimulatory sequence is administered to an individual who has been exposed to or infected by papillomavirus. The polynucleotide is not administered with papillomavirus antigen. Administration of the polynucleotide results in amelioration of symptoms of papillomavirus infection.

IT **217447-24-0**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunostimulatory polynucleotide sequences for reducing papillomavirus

infection)

L3 ANSWER 23 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
 ED Entered STN: 21 Sep 2001
 ACCESSION NUMBER: 2001:693110 CAPLUS
 DOCUMENT NUMBER: 135:267200
 TITLE: Methods of preventing and treating respiratory viral
 infection using **immunomodulatory**
 polynucleotide sequences
 INVENTOR(S): Van Nest, Gary
 PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
 SOURCE: PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|-------------|
| WO 2001068116 | A2 | 20010920 | WO 2001-US7839 | 20010312 |
| WO 2001068116 | A3 | 20020808 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2001046967 | A1 | 20011129 | US 2001-802686 | 20010309 |
| EP 1261352 | A2 | 20021204 | EP 2001-916581 | 20010312 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003526672 | T2 | 20030909 | JP 2001-566680 | 20010312 |
| PRIORITY APPLN. INFO.: | | | US 2000-188583P | P 20000310 |
| | | | US 2001-802686 | A2 20010309 |
| | | | WO 2001-US7839 | W 20010312 |

AB The invention provides methods of preventing and/or treating infection by a respiratory virus such as respiratory syncytial virus (RSV), particularly reducing infection and/or one or more symptoms of respiratory virus infection. A polynucleotide comprising an immunostimulatory sequence (an "ISS") is administered to an individual which is at risk of being exposed to a respiratory virus, has been exposed to a respiratory virus or is infected with a respiratory virus. The ISS is administered without any antigens of the respiratory virus. Administration of the ISS results in reduced incidence and/or severity of one or more symptoms of respiratory virus infection.

IT **217447-24-0**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunostimulatory polynucleotide sequences for preventing and treating respiratory viral infection)

L3 ANSWER 24 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
 ED Entered STN: 21 Sep 2001
 ACCESSION NUMBER: 2001:693098 CAPLUS
 DOCUMENT NUMBER: 135:267199
 TITLE: Methods of ameliorating symptoms of herpes infection
 using **immunomodulatory** polynucleotide
 sequences
 INVENTOR(S): Van Nest, Gary
 PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
 SOURCE: PCT Int. Appl., 49 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001068103 | A2 | 20010920 | WO 2001-US7841 | 20010312 |
| WO 2001068103 | A3 | 20020808 | | |
| WO 2001068103 | C2 | 20030306 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1265622 | A2 | 20021218 | EP 2001-957594 | 20010312 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003526670 | T2 | 20030909 | JP 2001-566667 | 20010312 |
| PRIORITY APPLN. INFO.: | | | US 2000-188556P | P 20000310 |
| | | | US 2001-802518 | A 20010309 |
| | | | WO 2001-US7841 | W 20010312 |

AB The invention provides new methods of preventing and/or treating herpes virus infections, particularly reducing infection, one or more symptoms and recurrence of one or more symptoms of herpes simplex virus infection. A polynucleotide comprising an immunostimulatory sequence (an "ISS") is administered to an individual which is at risk of being exposed to α -herpesvirinae, has been exposed to α -herpesvirinae or is infected with α -herpesvirinae. The ISS is administered without any α -herpesvirinae antigens. Administration of the ISS results in reduced incidence, recurrence, and severity of one or more symptoms of α -herpesvirinae infection.

IT 217447-24-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods of ameliorating symptoms of herpes infection using **immunomodulatory** polynucleotide sequences)

L3 ANSWER 25 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN
 ED Entered STN: 21 Sep 2001

09/802376

ACCESSION NUMBER: 2001:693075 CAPLUS
DOCUMENT NUMBER: 135:267227
TITLE: Methods of suppressing hepatitis virus infection using
immunomodulatory polynucleotide sequences
INVENTOR(S): Van Nest, Gary
PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001068078 | A2 | 20010920 | WO 2001-US7931 | 20010312 |
| WO 2001068078 | A3 | 20020912 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2002098199 | A1 | 20020725 | US 2001-802370 | 20010309 |
| EP 1282427 | A2 | 20030212 | EP 2001-913361 | 20010312 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003526662 | T2 | 20030909 | JP 2001-566642 | 20010312 |
| US 2003216340 | A1 | 20031120 | US 2003-357760 | 20030203 |
| PRIORITY APPLN. INFO.: | | | US 2000-188301P | P 20000310 |
| | | | US 2001-802370 | A 20010309 |
| | | | WO 2001-US7931 | W 20010312 |

AB Methods are provided for the treatment of hepatitis B virus (HBV) and hepatitis C virus (HCV) infections. A polynucleotide comprising an immunostimulatory sequence is administered to an individual who has been exposed to or infected by HBV and/or HCV. The polynucleotide is not administered with a HCV or HBV antigen. Administration of the polynucleotide results in amelioration of symptoms of HBV and/or HCV infection.

IT 251974-00-2

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods of suppressing hepatitis virus infection using **immunomodulatory** polynucleotide sequences in relation to decrease of viral antigen levels)

L3 ANSWER 26 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 21 Sep 2001

ACCESSION NUMBER: 2001:693074 CAPLUS

DOCUMENT NUMBER: 135:267226

TITLE: Methods of preventing and treating viral infections and using **immunomodulatory** polynucleotide

Searcher : Shears 571-272-2528

09/802376

INVENTOR(S): sequences
Van Nest, Gary
PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|------------|
| WO 2001068077 | A2 | 20010920 | WO 2001-US7840 | 20010312 |
| WO 2001068077 | A3 | 20020808 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2002028784 | A1 | 20020307 | US 2001-802685 | 20010309 |
| EP 1267893 | A2 | 20030102 | EP 2001-918567 | 20010312 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003535043 | T2 | 20031125 | JP 2001-566641 | 20010312 |
| PRIORITY APPLN. INFO.: | | | US 2000-188302P | P 20000310 |
| | | | US 2001-802685 | A 20010309 |
| | | | WO 2001-US7840 | W 20010312 |
| AB | The invention provides methods of suppression, prevention, and/or treatment of infection by viruses. A polynucleotide comprising an immunostimulatory sequence (an "ISS") is administered to an individual who is at risk of being exposed to, has been exposed to or is infected with a virus. The ISS-containing polynucleotide is administered without any antigens of the virus. Administration of the ISS-containing polynucleotide results in reduced incidence and/or severity of one or more symptoms of virus infection. | | | |
| IT | 251974-00-2 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (methods of preventing and treating viral infections and using immunomodulatory polynucleotide sequences) | | | |
| L3 | ANSWER 27 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN | | | |
| ED | Entered STN: 31 Aug 2001 | | | |
| ACCESSION NUMBER: | 2001:635850 CAPLUS | | | |
| DOCUMENT NUMBER: | 135:205543 | | | |
| TITLE: | Method for treating inflammatory bowel disease and other forms of gastrointestinal inflammation | | | |
| INVENTOR(S): | Raz, Eyal; Rachmilewitz, Daniel | | | |
| PATENT ASSIGNEE(S): | Regents of the University of California, USA | | | |

Searcher : Shears 571-272-2528

09/802376

SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001062207 | A2 | 20010830 | WO 2001-US6034 | 20010222 |
| WO 2001062207 | A3 | 20011220 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2001041751 | A5 | 20010903 | AU 2001-41751 | 20010222 |
| EP 1259264 | A2 | 20021127 | EP 2001-913036 | 20010222 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| PRIORITY APPLN. INFO.: | | | US 2000-184256P | P 20000223 |
| | | | WO 2001-US6034 | W 20010222 |

AB The invention provides a method for ameliorating gastrointestinal inflammation, particularly chronic gastrointestinal inflammation such as inflammatory bowel disease (IBD), in a subject. In one embodiment, the method comprises administering an **immunomodulatory** nucleic acid to a subject suffering from or susceptible to gastrointestinal inflammation.

IT **251974-00-2**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method for treating inflammatory bowel disease and other forms of gastrointestinal inflammation using **immunomodulatory** nucleic acids in combination with other agents in relation to biochem. effects)

L3 ANSWER 28 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 03 Aug 2001

ACCESSION NUMBER: 2001:565220 CAPLUS

DOCUMENT NUMBER: 135:147402

TITLE: **Immunomodulatory** polynucleotides for the treatment of an infection by an intracellular pathogen

INVENTOR(S): Raz, Eyal; Kornbluth, Richard; Catanzaro, Antonio; Hayashi, Tomoko; Carson, Dennis A.

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

Searcher : Shears 571-272-2528

09/802376

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|-----------------|-------------|
| WO 2001055341 | A2 | 20010802 | WO 2001-US3029 | 20010130 |
| WO 2001055341 | A3 | 20020328 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001031245 | A5 | 20010807 | AU 2001-31245 | 20010130 |
| US 2002086295 | A1 | 20020704 | US 2001-774403 | 20010130 |
| US 6552006 | B2 | 20030422 | | |
| EP 1253947 | A2 | 20021106 | EP 2001-903430 | 20010130 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2003212028 | A1 | 20031113 | US 2003-353917 | 20030128 |
| PRIORITY APPLN. INFO.: | | | US 2000-179353P | P 20000131 |
| | | | US 2001-774403 | A1 20010130 |
| | | | WO 2001-US3029 | W 20010130 |
| AB | The invention features methods for treatment or prevention of infection by intracellular pathogens (e.g. Mycobacterium species) by administration of an immunomodulatory nucleic acid mol. In one embodiment, an immunomodulatory nucleic acid mol. is administered in combination with another anti-pathogenic agent to provide a synergistic antipathogenic effect. | | | |
| IT | 220600-99-7 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (immunomodulatory polynucleotides for treatment of infection by intracellular pathogen) | | | |
| L3 | ANSWER 29 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN | | | |
| ED | Entered STN: 29 Jun 2001 | | | |
| ACCESSION NUMBER: | 2001:472530 CAPLUS | | | |
| DOCUMENT NUMBER: | 135:91513 | | | |
| TITLE: | Method for preventing an anaphylactic reaction | | | |
| INVENTOR(S): | Raz, Eyal; Horner, Anthony A. | | | |
| PATENT ASSIGNEE(S): | Regents of the University of California, USA | | | |
| SOURCE: | PCT Int. Appl., 38 pp. | | | |
| | CODEN: PIXXD2 | | | |
| DOCUMENT TYPE: | Patent | | | |
| LANGUAGE: | English | | | |
| FAMILY ACC. NUM. COUNT: | 1 | | | |
| PATENT INFORMATION: | | | | |

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2001045750 | A1 | 20010628 | WO 2000-US35064 | 20001220 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, | | | | |

Searcher : Shears 571-272-2528

09/802376

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-171830P P 19991221

AB The invention provides a method for reducing anaphylactic hypersensitivity response to an allergen in a subject. In one embodiment, the method comprises administering an **immunomodulatory** nucleic acid mol. to the subject. In another embodiment, the method comprises administering antigen with the **immunomodulatory** nucleic acid mol. to the subject, which antigen may be administered as a conjugate with or in admixt. with the **immunomodulatory** nucleic acid mol.

IT 220600-99-7

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(allergen and immunostimulatory nucleic acid for preventing an anaphylactic reaction)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 30 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 27 May 2001

ACCESSION NUMBER: 2001:380427 CAPLUS

DOCUMENT NUMBER: 135:496

TITLE: **Immunomodulatory** compositions containing an immunostimulatory sequence linked to antigen and methods of use thereof

INVENTOR(S): Tuck, Stephen; Van Nest, Gary

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: PCT Int. Appl., 97 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001035991 | A2 | 20010525 | WO 2000-US31385 | 20001115 |
| WO 2001035991 | A3 | 20011122 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1229933 | A2 | 20020814 | EP 2000-978688 | 20001115 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003513680 | T2 | 20030415 | JP 2001-537981 | 20001115 |
| PRIORITY APPLN. INFO.: | | | US 1999-165467P | P 19991115 |

Searcher : Shears 571-272-2528

US 2000-713136 A2 20001114
 WO 2000-US31385 W 20001115

AB The invention provides classes of **immunomodulatory** compns. which comprise an average of one or more immunostimulatory sequence (ISS) containing

polynucleotide conjugated, or attached, to antigen. The extent of conjugation affects **immunomodulatory** properties, such as extent of antigen-specific antibody formation, including Th1-associated antibody formation, and thus these various conjugate classes are useful for modulating the type and extent of immune response. The invention also includes methods of **modulating** an **immune** response using these compns.

IT **217638-05-6D**, allergen conjugates **217638-06-7D**, allergen conjugates **251974-00-2D**, allergen conjugates

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(**immunomodulatory** compns. containing an immunostimulatory sequence linked to antigen and methods of use thereof)

L3 ANSWER 31 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 11 May 2001

ACCESSION NUMBER: 2001:338716 CAPLUS

DOCUMENT NUMBER: 134:349012

TITLE: CpG receptor (CpG-R) and methods relating thereto

INVENTOR(S): MacKichan, Mary Lee

PATENT ASSIGNEE(S): Chiron Corporation, USA

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2001032877 | A2 | 20010510 | WO 2000-US41735 | 20001101 |
| WO 2001032877 | A3 | 20020103 | | |
| WO 2001032877 | C2 | 20020815 | | |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR | | | | |
| EP 1226251 | A2 | 20020731 | EP 2000-989738 | 20001101 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR | | | | |
| JP 2003514219 | T2 | 20030415 | JP 2001-535559 | 20001101 |
| PRIORITY APPLN. INFO.: | | | US 1999-163157P | P 19991102 |
| | | | US 1999-167389P | P 19991124 |
| | | | WO 2000-US41735 | W 20001101 |

AB The present invention is directed to nucleic acid mols. and polypeptides encoding a CpG receptor (CpG-R). The CpG-R contains a toll homol. domain (THD), interacts with the MyD88 adapter protein, and may bind to CpG oligonucleotides. The present invention is also directed to antibodies against CpG-R and to methods of **modulating** an **immune** response and to methods of identifying compds. which bind to and/or modulate CpG-R.

IT 251974-00-2

RL: PRP (Properties)

(unclaimed nucleotide sequence; cpG receptor (CpG-R) and methods relating thereto)

L3 ANSWER 32 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 25 Feb 2001

ACCESSION NUMBER: 2001:137053 CAPLUS

DOCUMENT NUMBER: 134:192226

TITLE: Methods of **modulating** an **immune** response using immunostimulatory sequences and compositions for use therein

INVENTOR(S): Van Nest, Gary

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001012223 | A2 | 20010222 | WO 2000-US22835 | 20000818 |
| WO 2001012223 | A3 | 20010920 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1204425 | A2 | 20020515 | EP 2000-955749 | 20000818 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | |
| JP 2003507341 | T2 | 20030225 | JP 2001-516568 | 20000818 |
| AU 774380 | B2 | 20040624 | AU 2000-67899 | 20000818 |
| PRIORITY APPLN. INFO.: | | | US 1999-149768P | P 19990819 |
| | | | WO 2000-US22835 | W 20000818 |

AB The invention provides methods of **modulating** an **immune** response to a second antigen which entail administration of a first antigen and an immunostimulatory polynucleotide. **Modulation** of the **immune** response is generally manifested as stimulation of a Th1 response.

IT 251974-00-2

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vaccines comprising a second antigen and immunostimulatory polynucleotide for inducing Th1 response to a first antigen)

L3 ANSWER 33 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 01 Sep 2000

ACCESSION NUMBER: 2000:608550 CAPLUS

DOCUMENT NUMBER: 133:213150

TITLE: Microemulsions with adsorbed macromolecules and microparticles for stimulation of immunity

INVENTOR(S): O'Hagan, Derek; Ott, Gary S.; Donnelly, John; Kazzaz, Jina; Ugozzoli, Mildred; Singh, Manmohan; Barackman, John

PATENT ASSIGNEE(S): Chiron Corp., USA

SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2000050006 | A2 | 20000831 | WO 2000-US3331 | 20000209 |
| WO 2000050006 | A3 | 20010118 | | |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1156781 | A2 | 20011128 | EP 2000-907228 | 20000209 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| JP 2002537102 | T2 | 20021105 | JP 2000-600618 | 20000209 |
| PRIORITY APPLN. INFO.: | | | US 1999-121858P | P 19990226 |
| | | | US 1999-146391P | P 19990729 |
| | | | US 1999-161997P | P 19991028 |
| | | | WO 2000-US3331 | W 20000209 |

AB Microparticles with adsorbent surfaces, methods of making such microparticles, and uses thereof, are disclosed. The microparticles comprise a polymer, such as a poly(α -hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone, a polyorthoester, a polyanhydride, and the like, and are formed using cationic, anionic, or nonionic detergents. The surface of the microparticles efficiently adsorb biol. active macromols., such as DNA, polypeptides, antigens, and adjuvants. Also provided are compns. of an oil droplet emulsion having a metabolizable oil and an emulsifying agent. Immunogenic compns. having an immunostimulating amount of an antigenic substance, and an immunostimulating amount of an adjuvant composition are also provided. Methods of stimulating an immune response, methods of immunizing a host animal against a viral, bacterial, or parasitic infection, and methods of increasing a Th1 immune response in a host animal by administering to the animal an immunogenic composition of the

microparticles, and/or microemulsions of the invention, are also provided.

IT 251974-00-2

RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (microemulsions with adsorbed macromols. and microparticles for stimulation of immunity)

09/802376

L3 ANSWER 34 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 21 Apr 2000

ACCESSION NUMBER: 2000:260051 CAPLUS

DOCUMENT NUMBER: 132:307238

TITLE: Anti-HIV compositions comprising immunostimulatory polynucleotides and HIV antigens

INVENTOR(S): Tighe, Helen; Raz, Eyal; Schwartz, David; Takabayashi, Kenji

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2000021556 | A1 | 20000420 | WO 1999-US23677 | 19991008 |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2344558 | AA | 20000420 | CA 1999-2344558 | 19991008 |
| AU 9964259 | A1 | 20000501 | AU 1999-64259 | 19991008 |
| EP 1117433 | A1 | 20010725 | EP 1999-951925 | 19991008 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| PRIORITY APPLN. INFO.: | | | US 1998-103733P | P 19981009 |
| | | | US 1999-415186 | A 19991007 |
| | | | WO 1999-US23677 | W 19991008 |

AB The invention relates to anti-viral **immunomodulatory** compns. comprising immunostimulatory polynucleotides and HIV antigens, such as gp120. Methods for **modulating** an **immune** response upon administration of the oligonucleotide and antigen compns. are also disclosed.

IT **217447-24-0**

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-HIV compns. comprising immunostimulatory polynucleotides and HIV antigens)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 35 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN

ED Entered STN: 10 Dec 1999

ACCESSION NUMBER: 1999:784115 CAPLUS

DOCUMENT NUMBER: 132:18784

TITLE: Immunostimulatory oligonucleotides with modified cytosine, and methods of use thereof

INVENTOR(S): Schwartz, David

Searcher : Shears 571-272-2528

09/802376

PATENT ASSIGNEE(S): Dynavax Technologies Corporation, USA
 SOURCE: PCT Int. Appl., 53 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|-----------------|------------|
| WO 9962923 | A2 | 19991209 | WO 1999-US12538 | 19990604 |
| WO 9962923 | A3 | 20010531 | | |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6562798 | B1 | 20030513 | US 1999-324191 | 19990601 |
| CA 2330225 | AA | 19991209 | CA 1999-2330225 | 19990604 |
| EP 1121373 | A2 | 20010808 | EP 1999-927241 | 19990604 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| AU 760304 | B2 | 20030515 | AU 1999-44194 | 19990604 |
| AU 9944194 | A1 | 19991220 | | |
| US 2004092468 | A1 | 20040513 | US 2003-365678 | 20030210 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1998-88310P | P 19980605 |
| | | | US 1999-324191 | A 19990601 |
| | | | WO 1999-US12538 | W 19990604 |
| AB | Immunomodulatory oligonucleotide compns. are disclosed. These oligonucleotides comprise an immunostimulatory hexanucleotide sequence including a modified cytosine. These oligonucleotides can be administered in conjunction with an immunomodulatory peptide or antigen. Methods of modulating an immune response upon administration of the oligonucleotide comprising a modified immunostimulatory sequence are also disclosed. | | | |
| IT | 217638-05-6 217638-06-7 251974-00-2 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (immunostimulatory oligonucleotides with modified cytosine, and methods of use) | | | |
| L3 | ANSWER 36 OF 36 CAPLUS COPYRIGHT 2004 ACS on STN | | | |
| ED | Entered STN: 31 Dec 1998 | | | |
| ACCESSION NUMBER: | 1998:813720 CAPLUS | | | |
| DOCUMENT NUMBER: | 130:65226 | | | |
| TITLE: | Immunostimulatory oligonucleotides, compositions thereof and methods of use thereof | | | |
| INVENTOR(S): | Schwartz, David; Roman, Mark; Dina, Dino | | | |
| PATENT ASSIGNEE(S): | Dynavax Technologies Corp., USA | | | |
| SOURCE: | PCT Int. Appl., 63 pp. CODEN: PIXXD2 | | | |

Searcher : Shears 571-272-2528

09/802376

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|----------|-----------------|-------------|
| WO 9855495 | A2 | 19981210 | WO 1998-US11578 | 19980605 |
| WO 9855495 | A3 | 19990527 | | |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9878178 | A1 | 19981221 | AU 1998-78178 | 19980605 |
| AU 753172 | B2 | 20021010 | | |
| EP 986572 | A2 | 20000322 | EP 1998-926311 | 19980605 |
| EP 986572 | B1 | 20031022 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| US 6225292 | B1 | 20010501 | US 1998-92314 | 19980605 |
| JP 2002517156 | T2 | 20020611 | JP 1999-502884 | 19980605 |
| AT 252596 | E | 20031115 | AT 1998-926311 | 19980605 |
| EP 1374894 | A2 | 20040102 | EP 2003-20257 | 19980605 |
| EP 1374894 | A3 | 20040922 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY | | | | |
| HK 1024701 | A1 | 20040130 | HK 2000-102617 | 20000429 |
| US 2002086839 | A1 | 20020704 | US 2001-770943 | 20010125 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1997-48793P | P 19970606 |
| | | | EP 1998-926311 | A3 19980605 |
| | | | US 1998-92314 | A1 19980605 |
| | | | WO 1998-US11578 | W 19980605 |
| AB | The invention relates to immunostimulatory oligonucleotide compns. These oligonucleotides comprise an immunostimulatory octanucleotide sequence. These oligonucleotides can be administered in conjunction with an immunostimulatory peptide or antigen. Methods for modulating an immune response upon administration of the oligonucleotide are also disclosed. In addition, an in vitro screening method to identify oligonucleotides with immunostimulatory activity is provided. Compns. containing the immunostimulatory oligonucleotide, antigen, adjuvant and co-stimulatory mol. (e.g. cytokine) are useful for treating cancer, allergy, asthma, viral infection, bacterial infection, and parasitic infection. | | | |
| IT | 217447-24-0 217638-05-6 217638-06-7 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (compns. containing immunostimulatory oligonucleotides, antigen, adjuvant, and costimulatory mol. for treating cancer, asthma, and infections) | | | |
| E1 THROUGH E42 ASSIGNED | | | | |

Searcher : Shears 571-272-2528

09/802376

FILE 'REGISTRY' ENTERED AT 12:00:36 ON 01 NOV 2004

L4 42 SEA FILE=REGISTRY ABB=ON PLU=ON (251974-00-2/BI OR 217447-24-0/BI OR 217638-05-6/BI OR 217638-06-7/BI OR 220600-99-7/BI OR 503638-07-1/BI OR 406856-76-6/BI OR 408555-79-3/BI OR 439896-90-9/BI OR 440004-73-9/BI OR 440004-74-0/BI OR 440004-81-9/BI OR 440004-82-0/BI OR 462164-09-6/BI OR 479469-88-0/BI OR 482386-35-6/BI OR 482387-18-8/BI OR 482661-42-7/BI OR 482663-60-5/BI OR 483382-52-1/BI OR 483382-54-3/BI OR 491894-86-1/BI OR 492479-51-3/BI OR 499810-15-0/BI OR 515181-95-0/BI OR 552901-87-8/BI OR 552901-88-9/BI OR 554461-70-0/BI OR 556163-51-0/BI OR 628357-70-0/BI OR 630432-24-5/BI OR 631925-82-1/BI OR 631926-19-7/BI OR 632370-48-0/BI OR 645428-19-9/BI OR 646074-82-0/BI OR 647920-72-7/BI OR 661771-84-2/BI OR 711385-52-3/BI OR 718384-16-8/BI OR 718384-37-3/BI OR 721175-12-8/BI)

L5 42 L1 AND L4

L5 ANSWER 1 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 721175-12-8 REGISTRY
CN INDEX NAME NOT YET ASSIGNED
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 141:99693

L5 ANSWER 2 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 718384-37-3 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 7: PN: US20040132677 SEQID: 2 unclaimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 141:99687

L5 ANSWER 3 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 718384-16-8 REGISTRY
CN 160: PN: US20040132677 SEQID: 139 unclaimed DNA (9CI) (CA INDEX NAME)
CI MAN
SQL 66

SEQ 1 tgactgtgaa cgttcgagat gatgactgtg aacgttcgag atgatgactg
=====
51 tgaacgttcg agatga

Searcher : Shears 571-272-2528

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=====

HITS AT: 1-66

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 141:99687

L5 ANSWER 4 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 711385-52-3 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 12: PN: WO2004052293 SEQID: 12 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 141:70229

L5 ANSWER 5 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 661771-84-2 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 219: PN: WO2004014322 SEQID: 1 unclaimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 140:198064

L5 ANSWER 6 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 647920-72-7 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 39: PN: WO2004006848 PAGE: 43 unclaimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 140:139452

L5 ANSWER 7 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

Searcher : Shears 571-272-2528

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RN 646074-82-0 REGISTRY
CN DNA, d(P-thio) (T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 140:105233

L5 ANSWER 8 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 645428-19-9 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 140:105233

L5 ANSWER 9 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 632370-48-0 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A), 5',5'',5'''-[O,O',O''-[nitrilotris[2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)thio-3,1-propanediyl]] tris(hydrogen phosphorothioate)] (9CI) (CA INDEX NAME)
CI MAN
SQL 66,44,22

SEQ 1 agtagagctt gcaagtgatca gttgactgtg aacgttcgag atga
=====

HITS AT: 23-44

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

REFERENCE 1: 140:26897

L5 ANSWER 10 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 631926-19-7 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A), 5'-[O-[6-[(6-hydroxyhexyl)dithio]hexyl] hydrogen phosphorothioate] (9CI) (CA INDEX NAME)
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

Searcher : Shears 571-272-2528

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 140:26897

L5 ANSWER 11 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN **631925-82-1** REGISTRY

CN DNA, d(T-sp-G-sp-A-sp-C-sp-T-sp-G-sp-T-sp-G-sp-A[oxy(mercaptophosphinylidene)oxy-1,2-ethanediylloxy-1,2-ethanediylloxy-1,2-ethanediylloxy-1,2-ethanediylloxy-1,2-ethanediylloxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-sp-T-sp-C-sp-G[oxy(mercaptophosphinylidene)oxy-1,2-ethanediylloxy-1,2-ethanediylloxy-1,2-ethanediylloxy-1,2-ethanediylloxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-sp-A-sp-T)(9CI) (CA INDEX NAME)

CI MAN

SQL 23

SEQ 1 tgactgtgaa cgttcgagat gat
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 140:26897

L5 ANSWER 12 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN **630432-24-5** REGISTRY

CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 51: PN: US20030225016 SEQID: 2 unclaimed DNA

CI MAN

SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 140:26897

L5 ANSWER 13 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN **628357-70-0** REGISTRY

CN DNA, d(P-thio) (T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)

CI MAN

SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

09/802376

REFERENCE 1: 140:26897

L5 ANSWER 14 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 556163-51-0 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1: PN: US20030130217 SEQID: 1 unclaimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 139:79154

L5 ANSWER 15 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 554461-70-0 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: US6589940 SEQID: 2 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 139:83965

L5 ANSWER 16 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552901-88-9 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-br5C-G-T-T-br5C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 26: PN: US6589940 SEQID: 16 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 139:83965

L5 ANSWER 17 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 552901-87-8 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-br5C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:

Searcher : Shears 571-272-2528

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CN 25: PN: US6589940 SEQID: 15 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
===== ==
HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 139:83965

L5 ANSWER 18 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 515181-95-0 REGISTRY
CN DNA, d(P-thio) (T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1: PN: US20030078223 SEQID: 1 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
===== ==
HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:331689

L5 ANSWER 19 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 503638-07-1 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:

CN 1: PN: US20030059773 SEQID: 1 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
===== ==
HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 141:99687

REFERENCE 2: 138:292710

L5 ANSWER 20 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 499810-15-0 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:

CN 44: PN: WO03014316 SEQID: 2 unclaimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga

Searcher : Shears 571-272-2528

===== ==
 HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:210275

L5 ANSWER 21 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 492479-51-3 REGISTRY
 CN DNA, d(P-thio) (T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
 CI MAN
 SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
 ===== ==

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:142468

L5 ANSWER 22 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 491894-86-1 REGISTRY
 CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
 CI MAN
 SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
 ===== ==

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:142468

L5 ANSWER 23 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 483382-54-3 REGISTRY
 CN DNA, d(P-thio) (T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A),
 5'-[O-(6-mercaptohexyl) hydrogen phosphorothioate] (9CI) (CA INDEX NAME)
 CI MAN
 SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
 ===== ==

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:88635

L5 ANSWER 24 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 483382-52-1 REGISTRY
 CN DNA, d(T-sp-G-sp-A-sp-C-sp-T-sp-G-sp-T-sp-G-sp-A[oxy(mercaptophosphinyldene)oxy-1,3-propanediyl]oxy(mercaptophosphinyldene)oxy]A-sp-C-sp-G-sp-T-sp-T-sp-C-sp-G[oxy(mercaptophosphinyldene)oxy-1,3-

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propanediyl oxy(mercaptophosphinylidene) oxy]A-sp-G-sp-A-sp-T-sp-G-sp-A-sp-T)
(9CI) (CA INDEX NAME)
CI MAN
SQL 23

SEQ 1 tgactgtgaa cgttcgagat gat
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:88635

L5 ANSWER 25 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 482663-60-5 REGISTRY
CN DNA, d(T-sp-G-sp-A-sp-C-sp-T-sp-G-sp-T-sp-G-sp-A[oxymercaptophosphinylideneoxy-1,2-ethanediyl oxy-1,2-ethanediyl oxy-1,2-ethanediyl oxy(mercaptophosphinylidene)oxy]A-sp-C-sp-G-sp-T-sp-T-sp-C-sp-G[oxymercaptophosphinylideneoxy-1,2-ethanediyl oxy-1,2-ethanediyl oxy-1,2-ethanediyl oxy(mercaptophosphinylidene)oxy]A-sp-G-sp-A-sp-T-sp-G-sp-A-sp-T)
(9CI) (CA INDEX NAME)
CI MAN
SQL 23

SEQ 1 tgactgtgaa cgttcgagat gat
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:88635

L5 ANSWER 26 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 482661-42-7 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A), 5',5'',5'''-[O,O',O''-[nitrilotris[2,1-ethanediyl(2,5-dioxo-1,3-pyrrolidinediyl)thio-3,1-propanediyl]] tris(hydrogen phosphorothioate)] (9CI) (CA INDEX NAME)
CI MAN
SQL 66,22,22,22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

REFERENCE 1: 138:88635

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L5 ANSWER 27 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN **482387-18-8** REGISTRY
CN 129: PN: WO03000922 SEQID: 139 unclaimed DNA (9CI) (CA INDEX NAME)
CI MAN
SQL 66

SEQ 1 tgactgtgaa cgttcgagat gatgactgtg aacgttcgag atgatgactg
=====
51 tgaacgttcg agatga
=====

HITS AT: 1-66

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:88635

L5 ANSWER 28 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN **482386-35-6** REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: WO03000922 SEQID: 2 unclaimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:88635

L5 ANSWER 29 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN **479469-88-0** REGISTRY
CN DNA, d(P-thio) (T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:88635

L5 ANSWER 30 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN **462164-09-6** REGISTRY
CN DNA, d(P-thio) (T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: WO02074922 SEQID: 2 claimed DNA
CI MAN
SQL 22

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SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:273193

L5 ANSWER 31 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 440004-82-0 REGISTRY

CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-s6G-T-T-C-s6G-A-G-A-T-G-A) (9CI) (CA INDEX
NAME)

OTHER NAMES:

CN 48: PN: WO02052002 SEQID: 48 claimed sequence

CI MAN

SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:73254

L5 ANSWER 32 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 440004-81-9 REGISTRY

CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-s4T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX
NAME)

OTHER NAMES:

CN 47: PN: WO02052002 SEQID: 47 claimed sequence

CI MAN

SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:73254

L5 ANSWER 33 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 440004-74-0 REGISTRY

CN DNA, d(T-G-A-C-T-G-T-G-A-A-br5C-G-T-T-br5C-G-A-G-A-T-G-A) (9CI) (CA INDEX
NAME)

OTHER NAMES:

CN 38: PN: WO02052002 SEQID: 38 claimed sequence

CI MAN

SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Searcher : Shears 571-272-2528

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REFERENCE 1: 137:73254

L5 ANSWER 34 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN **440004-73-9** REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-br5C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 37: PN: WO02052002 SEQID: 37 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:73254

L5 ANSWER 35 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN **439896-90-9** REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 59: PN: WO02052002 SEQID: 59 unclaimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:73254

L5 ANSWER 36 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN **408555-79-3** REGISTRY
CN DNA, d(P-thio)(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 136:288732

L5 ANSWER 37 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN **406856-76-6** REGISTRY
CN 19: PN: WO0226209 SEQID: 19 unclaimed DNA (9CI) (CA INDEX NAME)
CI MAN
SQL 22

Searcher : Shears 571-272-2528

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SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 136:293507

L5 ANSWER 38 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN **251974-00-2** REGISTRY

CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 12: PN: WO0050006 SEQID: 19 claimed DNA

CN 12: PN: WO0050075 PAGE: 9 claimed DNA

CN 1: PN: WO0062787 PAGE: 18 claimed DNA

CN 1: PN: WO0135991 SEQID: 1 claimed DNA

CN 1: PN: WO0143778 PAGE: 18 unclaimed DNA

CN 1: PN: WO0168077 SEQID: 1 claimed DNA

CN 1: PN: WO0168143 SEQID: 1 claimed DNA

CN 2: PN: WO0056342 SEQID: 2 claimed DNA

CN 50: PN: WO0132699 SEQID: 21 unclaimed DNA

CI MAN

SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
=====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 135:267227

REFERENCE 2: 135:267226

REFERENCE 3: 135:262226

REFERENCE 4: 135:205543

REFERENCE 5: 135:66218

REFERENCE 6: 135:496

REFERENCE 7: 134:349012

REFERENCE 8: 134:192226

REFERENCE 9: 134:99570

REFERENCE 10: 133:334037

L5 ANSWER 39 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN **220600-99-7** REGISTRY

CN DNA, d(P-thio) (T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX NAME)

OTHER NAMES:

Searcher : Shears 571-272-2528

09/802376

CN 1: PN: WO0145750 SEQID: 1 claimed DNA
CN 1: PN: WO0155341 SEQID: 1 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
===== ==
HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 135:366775
REFERENCE 2: 135:287151
REFERENCE 3: 135:147402
REFERENCE 4: 135:91513
REFERENCE 5: 134:146304
REFERENCE 6: 133:3455
REFERENCE 7: 131:270631
REFERENCE 8: 130:232485
REFERENCE 9: 130:181397

L5 ANSWER 40 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 217638-06-7 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-br5C-G-T-T-br5C-G-A-G-A-T-G-A) (9CI) (CA INDEX
NAME)
OTHER NAMES:
CN 8: PN: WO0135991 SEQID: 8 claimed DNA
CI MAN
SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
===== ==
HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 135:271874
REFERENCE 2: 135:496
REFERENCE 3: 132:18784
REFERENCE 4: 130:65226

L5 ANSWER 41 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN
RN 217638-05-6 REGISTRY
CN DNA, d(T-G-A-C-T-G-T-G-A-A-br5C-G-T-T-C-G-A-G-A-T-G-A) (9CI) (CA INDEX
NAME)

Searcher : Shears 571-272-2528

OTHER NAMES:

CN 7: PN: WO0135991 SEQID: 7 claimed DNA
 CI MAN
 SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
 =====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 135:271874

REFERENCE 2: 135:496

REFERENCE 3: 132:18784

REFERENCE 4: 130:65226

L5 ANSWER 42 OF 42 REGISTRY COPYRIGHT 2004 ACS on STN

RN 217447-24-0 REGISTRY

CN DNA, d(T-C-A-T-C-T-C-G-A-A-C-G-T-T-C-A-C-A-G-T-C-A), double-stranded
 complementary (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN DNA, d(T-G-A-C-T-G-T-G-A-A-C-G-T-T-C-G-A-G-A-T-G-A), double-stranded
 complementary (9CI)

OTHER NAMES:

CN 19: PN: WO0020039 SEQID: 19 claimed DNA

CN 1: PN: WO0016804 PAGE: 23 unclaimed DNA

CN 1: PN: WO0168103 SEQID: 1 claimed DNA

CN 1: PN: WO0176642 SEQID: 1 unclaimed DNA

CN 2: PN: WO0067787 PAGE: 26 claimed DNA

CN 4: PN: WO0168144 PAGE: 49 claimed DNA

CI MAN

SQL 22

SEQ 1 tgactgtgaa cgttcgagat ga
 =====

HITS AT: 1-22

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 135:366775

REFERENCE 2: 135:317456

REFERENCE 3: 135:271874

REFERENCE 4: 135:267231

REFERENCE 5: 135:267201

REFERENCE 6: 135:267200

REFERENCE 7: 135:267199

09/802376

REFERENCE 8: 134:4037

REFERENCE 9: 132:307238

REFERENCE 10: 132:278177

(FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 12:02:11 ON 01 NOV 2004)
L6 0 S L1

FILE 'HOME' ENTERED AT 12:02:26 ON 01 NOV 2004